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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,542

12/18/2006

Philip Caunt

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EXAMINER

HUANG, CHENG YUAN

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

01/22/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

euspto@slspatents.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,542	<b>Applicant(s)</b> CAUNT ET AL.	
	<b>Examiner</b> CHENG HUANG	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 20-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20071119, 20060505</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I, claims 1-19 in the reply filed on 20 November 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 20-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-7 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Caselli et al. (EP 1146111).
5. Regarding claim 1, Caselli et al. teaches a composition for disinfecting a space (See Abstract) comprising one or more essential oils or essential oil components (paragraph [0033]), and a mixture of volatile and non-volatile solvents (paragraphs [0023], [0110], and [0124]) absorbed on a carrier (paragraph [0139]).

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6. Regarding the limitation that the composition is for disinfecting a space and “vapor-producing” as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that “if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention’s limitations, then the preamble is not considered a limitation and is of no significance to claim construction”. Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.
7. It is the examiner’s position that the preamble does not state any distinct definition of any of the claimed invention’s limitations and further that the purpose or intended use, i.e. “vapor-producing” or “for disinfecting a space”, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art composition and further that the prior art structure which is a composition identical to that set forth in the present claims is capable of performing the recited purpose or intended use.
8. Regarding claims 2, 3, and 6, Caselli et al. teaches wherein the essential oil component is cinnamic aldehyde, cinnamic alcohol, and/or cinnamon oil (paragraph [0036]).
9. Regarding claim 4, Caselli et al. teaches wherein the essential oil component is eugenol (paragraph [0047]).

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10. Regarding claims 7 and 8, Caselli et al. teaches wherein the volatile solvent is an alcohol and wherein the alcohol is isopropanol (paragraph [0124]).

11. Regarding claim 9, Caselli et al. teaches wherein the non-volatile solvent is water (paragraph [0023]) .

12. Regarding claim 10, Caselli et al. teaches wherein the non-volatile solvent is glycol (paragraph [0111]).

13. Regarding claim 12, Caselli et al. teaches wherein the ratio of volatile to non-volatile solvents is in the ratio of about 1:6 (page 14, lines 21 and 31, Example I, where water is 60%, paragraph [0023]) which falls within the claimed ratio of 10:1 to 1:10.

14. Claims 1 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Romano et al. (U.S. Patent No. 6,103,683).

15. Regarding claim 1, Romano et al. teaches a composition for disinfecting a space (col. 1, lines 6-12) comprising one or more essential oils or essential oil components (col. 2, lines 54-55, col.3, lines 15-17), and a mixture of volatile and non-volatile solvents (col. 10, lines 2-24) absorbed on a carrier (col. 11, lines 7-10).

16. Regarding the limitation that the composition is for disinfecting a space and while there is no disclosure of “vapor-producing” as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that “if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention’s limitations, then the preamble is not considered a limitation and is of no significance to claim

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construction”. Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

17. It is the examiner’s position that the preamble does not state any distinct definition of any of the claimed invention’s limitations and further that the purpose or intended use, i.e. “vapor-producing” or “for disinfecting a space”, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art composition and further that the prior art structure which is a composition identical to that set forth in the present claims is capable of performing the recited purpose or intended use.

18. Regarding claim 6, Romano et al. teaches wherein the essential oil is cinnamon oil (col. 3, line 38).

19. Regarding claims 7 and 8, Romano et al. teaches wherein the volatile solvent is an alcohol and wherein the alcohol is isopropanol (col. 10, line 24).

20. Regarding claim 9, Romano et al. teaches wherein the non-volatile solvent is water (col. 11, lines 45-50).

21. Regarding claim 10, Romano et al. teaches wherein the non-volatile solvent is a glycol (col. 10, line 8).

22. Claims 1, 7- 8, and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by McCue et al. (U.S. Patent No. 5,403,587).

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23. Regarding claim 1, McCue et al. teaches a composition for disinfecting a space (col. 1, lines 6-8) comprising one or more essential oils or essential oil components (col. 2, lines 46-48), and a mixture of volatile and non-volatile solvents (col. 4, lines 12-16) absorbed on a carrier (col. 5, lines 50-52).
24. Regarding claims 7 and 8, McCue et al. teaches wherein the volatile solvent is an alcohol and wherein the alcohol is isopropanol (col. 4, lines 15-16).
25. Regarding claim 9, McCue et al. teaches wherein the non-volatile solvent is water (col. 4, line 44).
26. Regarding claims 10 and 11, McCue et al. teaches wherein the non-volatile solvent is a glycol wherein the glycol is (mono)propylene glycol (col. 4, lines 15-16).

### ***Claim Rejections - 35 USC § 103***

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
29. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caselli et al. (EP 1146111) in view of Scheuing et al. (U.S. Patent Application Publication No. 2003/0220223).
30. Caselli et al. is relied upon as disclosed above.
31. Regarding claims 13-14, Caselli et al. fails to teach the claimed carrier material.
32. However, Scheuing et al. teaches a composition for disinfecting a space (paragraph [0042]) wherein carrier is a non-woven material and the non-woven carrier is a combination of cellulose and polypropylene (paragraph [0072]).
33. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose a non-woven cellulose and polypropylene combination for the carrier of Caselli et al. as an effective absorbent material (Scheuing et al. paragraphs [0070]-[0074]).
34. Claims 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caselli et al. (EP 1146111) in view of Sherba et al. (U.S. Patent No. 5,149,524).
35. Caselli et al. is relied upon as disclosed above.
36. Regarding claim 15, Caselli et al. fails to teach wherein the carrier is cardboard.
37. However, Sherba et al. teaches a disinfectant composition on a carrier and wherein the carrier is cardboard (col. 4, lines 13-24 and fifth industry listing down list in column).
38. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the carrier of Caselli et al. to be cardboard depending on the application for a desired substrate/carrier to be protected against microorganisms (col. 4, lines 20-24).



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39. Regarding claim 18, although Caselli et al. in view of Sherba et al. does not disclose the size limitation as claimed, it is noted that limitations relating to size are not sufficient to patentably distinguish the present invention over the prior art. Furthermore, given that the structural laminate of Caselli et al. in view of Sherba et al. would not perform differently than that claimed, the claimed structural laminate is not patentably distinctly from that of Caselli et al. in view of Sherba et al., given that the courts have held that where the only difference between the prior art and the claims is a recitation of relative dimensions, there is no patentable distinction between the claims and the prior art (see MPEP 2144.04 IVA). Finally, it is noted one of ordinary skill would easily recognize the composite of the prior art could be sized to fulfill a desired end use.

40. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caselli et al. (EP 1146111) in view of Ogawa et al. (U.S. Patent Application Publication No. 2003/0088025),

41. Caselli et al. is relied upon as disclosed above.

42. Caselli et al. fails to teach wherein the carrier is sintered plastic.

43. However, Ogawa et al. teaches an antiseptic composition absorbed on a carrier wherein the carrier is sintered plastic (5<sup>th</sup> to last line in paragraph [0058], paragraphs [0060] and [0064]).

44. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the carrier of Caselli et al. to be sintered plastic given its porosity (Ogawa et al., paragraph [0064]) for absorbing the composition.

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45. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caselli et al. (EP 1146111) in view of Caunt et al. (EP 0965541)

46. Caselli et al. is relied upon as disclosed above.

47. Caselli et al. fails to teach wherein the carrier is amorphous silicon dioxide.

48. However, Caunt et al. teaches an antimicrobial a composition with a carrier of amorphous silicon dioxide (paragraphs [0001] and [0009]).

49. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the carrier of Caselli et al. to be amorphous silicon dioxide for anti-microbial properties (Caunt et al., paragraph [0009]).

50. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Caselli et al. (EP 1146111) in view of Hartman et al. (U.S. Patent Application Publication No. 2005/0106121).

51. Regarding claim 19, Caselli et al. fails to teach wherein the carrier is a self-adhesive item or label.

52. However, Hartman et al. teaches a composition for disinfecting a space (paragraph [0016]) wherein the carrier is a self-adhesive item or label (paragraphs [0063] and [0065]).

53. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose a self-adhesive item or label for the carrier of Caselli et al. for generating desirable amounts of chlorine dioxide gas over a desirable period of time when exposed to water or water vapor to prevent of retard microbial growth within an atmosphere or within an enclosure for a sustained period of time and, therefore, be utilized to control microbial growth on items contained in a package (paragraphs [0016] and [0075]).

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54. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romano et al. (U.S. Patent No. 6,103,683) in view of Scheuing et al. (U.S. Patent Application Publication No. 2003/0220223).

55. Caselli et al. is relied upon as disclosed above.

56. Regarding claims 13-14, Romano et al. fails to teach the claimed carrier material.

57. However, Scheuing et al. teaches a composition for disinfecting a space (paragraph [0042]) wherein carrier is a non-woven material and the non-woven carrier is a combination of cellulose and polypropylene (paragraph [0072]).

58. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose a non-woven cellulose and polypropylene combination for the carrier of Romano et al. as an absorbent material (Scheuing et al. paragraphs [0070]-[0074]).

59. Claims 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romano et al. (U.S. Patent No. 6,103,683) in view of Sherba et al. (U.S. Patent No. 5,149,524).

60. Romano et al. is relied upon as disclosed above.

61. Regarding claim 15, Romano et al. fails to teach wherein the carrier is cardboard.

62. However, Sherba et al. teaches a disinfectant composition on a carrier and wherein the carrier is cardboard (col. 4, lines 13-24 and fifth industry listing down list in column).

63. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the carrier of Romano et al. to be cardboard depending on the application for a desired substrate/carrier to be protected against microorganisms (col. 4, lines 20-24).

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64. Regarding claim 18, although Romano et al. in view of Sherba et al. does not disclose the size limitation as claimed, it is noted that limitations relating to size are not sufficient to patentably distinguish the present invention over the prior art. Furthermore, given that the structural laminate of Romano et al. in view of Sherba et al. would not perform differently than that claimed, the claimed structural laminate is not patentably distinctly from that of Romano et al. in view of Sherba et al., given that the courts have held that where the only difference between the prior art and the claims is a recitation of relative dimensions, there is no patentable distinction between the claims and the prior art (see MPEP 2144.04 IVA). Finally, it is noted one of ordinary skill would easily recognize the composite of the prior art could be sized to fulfill a desired end use.

65. Claim 16 is ejected under 35 U.S.C. 103(a) as being unpatentable over Romano et al. (U.S. Patent No. 6,103,683) in view of Ogawa et al. (U.S. Patent Application Publication No. 2003/0088025),

66. Romano et al. is relied upon as disclosed above.

67. Romano et al. fails to teach wherein the carrier is sintered plastic.

68. However, Ogawa et al. teaches an antiseptic composition absorbed on a carrier wherein the carrier is sintered plastic (5<sup>th</sup> to last line in paragraph [0058], paragraphs [0060] and [0064]).

69. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the carrier of Romano et al. to be sintered plastic given its porosity (Ogawa et al., paragraph [0064]) for absorbing the composition.

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70. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Romano et al. (U.S. Patent No. 6,103,683) in view of Caunt et al. (EP 0965541)

71. Romano et al. is relied upon as disclosed above.

72. Romano et al. fails to teach wherein the carrier is amorphous silicon dioxide.

73. However, Caunt et al. teaches an antimicrobial a composition with a carrier of amorphous silicon dioxide (paragraphs [0001] and [0009]).

74. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose the carrier of Romano et al. to be amorphous silicon dioxide for anti-microbial properties (Caunt et al., paragraph [0009]).

75. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Romano et al. (U.S. Patent No. 6,103,683) in view of Hartman et al. (U.S. Patent Application Publication No. 2005/0106121).

76. Regarding claim 19, Romano et al. fails to teach wherein the carrier is a self-adhesive item or label.

77. However, Hartman et al. teaches a composition for disinfecting a space (paragraph [0016]) wherein the carrier is a self-adhesive item or label (paragraphs [0063] and [0065]).

78. It would have been obvious to one of ordinary skill in the art at the time of the invention to choose a self-adhesive item or label for the carrier of Romano et al. for generating desirable amounts of chlorine dioxide gas over a desirable period of time when exposed to water or water vapor to prevent of retard microbial growth within an atmosphere or within an enclosure for a

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sustained period of time and, therefore, be utilized to control microbial growth on items contained in a package (paragraphs [0016] and [0075]).

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***Conclusion***

79. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENG YUAN HUANG whose telephone number is (571) 270-7387. The examiner can normally be reached on Monday-Thursday from 8 AM to 4 PM.

80. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho, can be reached at 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

81. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. H./

Cheng Yuan Huang

Examiner, Art Unit 1794

January 7, 2009

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794